

LRI	Parameter Name	Description	Severity	CID Alarm Value	SNMP Trap
Base Channel Group: Power Supply 1	Power Supply #1 Status	Power Supply # 1 Failure Alarm denoting that the Power Supply has failed, Monitored via CCCP Card	Minor	0007	PowerSupply1Event
	Power Supply #1 Status	Power Supply # 1 Over Temperature Alarm which indicates that the power supply is within 10 Deg C of shutting down due to Over-temperature Condition, Monitored via CCCP Card	Notify/ Warning	0008	PowerSupply1Event
Base Channel Group: Power Supply 2	Power Supply #2 Status	Power Supply # 2 Failure Alarm denoting that the Power Supply has failed, Monitored via CCCP Card	Minor	0009	PowerSupply2Event
	Power Supply #2 Status	Power Supply # 2 Over Temperature Alarm which indicates that the power supply is within 10 Deg C of shutting down due to Over-temperature Condition, Monitored via CCCP Card.	Notify/ Warning	000A	PowerSupply2Event
	External Alarm #1	Software BIT status that denotes "0 = Pass, 1 = Fault Detected", Monitored via CCCP Card. External Alarms are user definable at time of installtion and are intended to provide a user a means of monitoring facility alarms remotely withing the Spectrapoint NMS System.	Notify/ Warning	0001	ExternalAlarm1
	External Alarm #2	Software BIT status that denotes "0 = Pass, 1 = Fault Detected", Monitored via CCCP Card. External Alarms are user definable at time of installtion and are intended to provide a user a means of monitoring facility alarms remotely withing the Spectrapoint NMS System.	Notify/ Warning	0002	ExternalAlarm2
	External Alarm #3	Software BIT status that denotes "0 = Pass, 1 = Fault Detected", Monitored via CCCP Card. External Alarms are user definable at time of installtion and are intended to provide a user a means of monitoring facility alarms remotely withing the Spectrapoint NMS System.	Notify/ Warning	0003	ExternalAlarm3

Base Channel Group: Chassis	External Alarm #4	Software BIT status that denotes "0 = Pass, 1 = Fault Detected", Monitored via CCCP Card. External Alarms are user definable at time of installtion and are intended to provide a user a means of monitoring facility alarms remotely withing the Spectrapoint NMS System.	Notify/ Warning	0004	ExternalAlarm4
	External Alarm #5	Software BIT status that denotes "0 = Pass, 1 = Fault Detected", Monitored via CCCP Card. External Alarms are user definable at time of installtion and are intended to provide a user a means of monitoring facility alarms remotely withing the Spectrapoint NMS System.	Notify/ Warning	0005	ExternalAlarm5
	External Alarm #6	Software BIT status that denotes "0 = Pass, 1 = Fault Detected", Monitored via CCCP Card. External Alarms are user definable at time of installtion and are intended to provide a user a means of monitoring facility alarms remotely withing the Spectrapoint NMS System.	Notify/ Warning	0006	ExternalAlarm6
	Chassis Alarm	Software BIT status that denotes "0 = Pass, 1 = Fault Detected", Monitored via CCCP Card. This is another External Alarms that is ment to insturment just the Chassis/Rack that this BCG is in. This may or maynot be configured.	Notify/ Warning	000C	ChassisAlarm
	Fuse Alarm	Indicates that 1 of the 2 fuses on the Input DC card has blown. The signal "ORs" both fuse indicators together. These are used to protect the Base Channel Group from and over current event on the -48 VDC input lines.	Notify/ Warning	000B	FuseAlarm
	Fan Alarm Status	Fan Fail Indictor provides indication that the Fan speed (rpm) has dropped about 40% of its rating for more than 10 seconds. This corresponds to approx 900 rpm +/- 200 rpm. This is pulled in via the DC Input Card and the CCCP Card. Values: "0 = Pass, 1 = Fault Detected"	Notify/ Warning	0000	FanAlarm

Base Channel Group: CCCP Card	RS-485 Comm Status	Part of Pre Application Testing that tests the Octal UART's 5 RS-485 Ports on the CCCP. Software BIT status that denotes "0 = Pass, 1 = Fault Detected".	Critical	0F08 CCCP Object	ChannelGroupCommEvent
	RS-232 Comm Status	Part of Pre Application Testing that tests the Octal UART's 2 RS-232 Ports on the CCCP. Software BIT status that denotes "0 = Pass, 1 = Fault Detected".	Notify/ Warning	0F09 CCCP Object	ChannelGroupCommEvent
	Ethernet Comm Status	Part of Pre Application Testing that tests the Octal UART's Ethernet Port on the CCCP. Software BIT status that denotes "0 = Pass, 1 = Fault Detected".	Critical	0F0A CCCP Object	ChannelGroupCommEvent
	HSM PLL	Monitors the Phase Lock Loop of the 5.63 MHz (variable) Clock Generator to the 10 Mhz FRO output Clock. Values: "0 = Pass, 1 = Fault Detected"	Critical	1200 CCCP Object	
	SNMP NE Offline	This denotes that the SNMP Manager at the NOC has lost communications capability with this particular Base Channel Group. There are a programmable number of retry attempts and timeout period for each try. After those are used up the NE is marked as "Offline" - THIS IS a SNMP ONLY Alarm	Critical	N/A	SNMP NE Offline
	DCDM 60.1 MHz Clock State	Provides a Bit indication that the 60.1 MHz Osc is within a preset power threshold level OR is above a certain frequency. Values: 0 = OK & 1 = Fault	Critical	0100	dcdm60MhzClockEvent
	DCDM 4 MHz Clock State	Provides a Bit indication that the 4 MHz Osc is within a preset power threshold level OR is above a certain frequency. Values: 0 = OK & 1 = Fault	Critical	0101	dcdm4MhzClockEvent
	DCDM Background BIT Result	Current Not In Use. Values: 0 = OK & 1 = Fault	Critical	0102	dcdmBITstatus
	"+24 VDC" onboard Supply BIT status	Indicates if the +24V power is within the hardware's limit. Values: 0 = OK & 1 = Fault	Critical	0103	dcdmPowerSupplyEvent
	Reset Indicator	Indicates that the board was recently reset and is unprovisioned since the Reset.	Notify/ Warning	N/A	qcdmEquipmentEvent

Base Channel Group: Quad DCDM	CPU Instruction/ Operation Check Status	Software BIT status that denotes "0 = Pass, 1 = Fault Detected" Part of POST on the 860SAR - Not sure this will be reportable since the Processor will lock up.	Critical	0F04 DCDM Object	qdcdmStartupCheckEvent
	ROM CRC Check Status	Software BIT status that denotes "0 = Pass, 1 = Fault Detected" Part of POST on the 860SAR - Not sure this will be reportable since the Processor will lock up.	Critical	0F05 DCDM Object	qdcdmStartupCheckEvent
	Ram Data/Address Check Status	Software BIT status that denotes "0 = Pass, 1 = Fault Detected" Part of POST on the 860SAR - Not sure this will be reportable since the Processor will lock up.	Critical	0F06 DCDM Object	qdcdmStartupCheckEvent
	ISR Check Status	Software BIT status that denotes "0 = Pass, 1 = Fault Detected" Part of POST on the 860SAR - Not sure this will be reportable since the Processor will lock up.	Critical	0F07 DCDM Object	qdcdmStartupCheckEvent
	Quad DCDM Communication Error	Alarm indication that Loss of communications between the CCCP and the affect DCDM has occurred.	Minor	01FF	qDcdmCommunicationFailure
	Fault LED State Setting	0 = Fault Light Off & 2 = Fault Light on - This is controllable remotely to turn on/off by command or autonomously controllable by the card itself.	Status Only	N/A	N/A
	Actual Upstream L-Band Frequency	Denotes the actual Frequency that the Tuner/Demod is locked on. 950 - 1950 Mhz with 1 MHz resolution - Performance Monitoring Parameter	Perf Mon	N/A	N/A
	Actual Upstream Data rate	Provides the actual current data rate throughput for the uplink that is tied to that Tuner/Demod 2000 - 10,000 kbps - Performance Monitoring Parameter	Perf Mon	N/A	N/A
	Actual Frequency Error	Provides the actual Frequeuncy Drift Error (in KHz) away from the desired setting that the Tuner/Demod is loced to. (0 - FFFF KHz) - Performance Monitoring Parameter	Perf Mon	N/A	N/A

Base Channel Group: Quad DCDM - Tuner/Demod (1 of 4)	Estimated Es/No	Actual Real time value of the Es/No, used for Power Control monitoring point on the upstream path (Values: 0 - 25.5 dB) - Performance Monitoring Parameter	Perf Mon	N/A	N/A
	AGC Accumulator	Actual value of the analog AGC register. Larger values of this parameter mean more gain is being used to adjust the signal input to the A/Ds in the Demod. Upon saturation level for 10 consecutive samples the AGC Saturated BIT indicator will be issued. Value: 0x00 - 0xFF - Performance Monitoring Parameter	Perf Mon	N/A	N/A
	DAGC Accumulator	Actual value of the Digital AGC register. Larger values of this parameter mean more gain is being used to adjust the signal input to the A/Ds in the Demod. Upon saturation level for 10 consecutive samples the DAGC Saturated BIT indicator will be issued. Value: 0 - 63 Performance Monitoring Parameter	Perf Mon	N/A	N/A
	Acquisition State	Current Acquisition State: 0 = Acquisition Disabled 1 = Fade Acquisition 2 = Change of Parameter Acquisition 3 = Locked to Signal 4 = Power Up Acquisition	Status Only	N/A	N/A
	Service Request	This is an Indication denoting the Tuner/Demod is suppose to be Active or Non-Active (allocated or unallocated). 0 = Service NOT Requested & 1 = Service Requested	Status Only	N/A	N/A
	Link State	Current Not In Use. Values: 0 = OK & 1 = Fault	Critical	0110 0120 0130 0140	linkStateEvent
	Frequency Drift State	Indicates that the measured frequency error at the tuner demodulator exceeds +/-255 kHz from the Target Frequency. This is disable when the Carrier Lock is "Unlocked". Values: 0 = OK & 1 = Fault	Notify/ Warning	0111 0121 0131 0141	frequencyDriftEvent

	DAGC Saturated State	Indicates that the Digital Automatic Gain Control (DAGC) has saturated for atleast 10 consecutive samples. This is not necessarily a fault indication. Normal operations might cause this such as a rain fade condition. Values: 0 = Not Saturated & 1 = Saturated	Notify/ Warning	0112 0122 0132 0142	dAGCEvent
	AGC Saturated State	Indicates that the Analog Automatic Gain Control (AGC) has saturated for atleast 10 consecutive samples. This is not necessarily a fault indication. Normal operations might cause this such as a rain fade condition. Values: 0 = Not Saturated & 1 = Saturated	Notify/ Warning	0113 0123 0133 0143	aGCEvent
	Tuner Demod Carrier Lock State	This provides indication that the Synthesizer is locked on to an upstream Carrier at the specified frequency of the Tuner. In actuality this is a wide range and varies based on the Symbol rate of the Demod (combination of the data rate and Code rate). If the freq drifts the carrier will remain locked much longer and the initial indication will be seen in the Freq Drift State alarm (see above) Values: 0 = Locked & 1 = Unlocked,	Critical	0114 0124 0134 0144	tunerDemodLockEvent
	Synthesizer Phase Lock State	This provides and indication that the Synthesizer's oscillator is phase locked loop is locked to an external reference frequency which traces back the the Reference Oscillator Card. Values: 0 = Locked & 1 = Unlocked	Minor	0115 0125 0135 0145	synthesizerPhaseEvent
	10 MHz Ext Test Port	External Test port that is coupled off the Input External 10 MHz Clk Signal.	On Equip Test Port	N/A	N/A
	Clock Source Select	Denotes the desired mode the FRO was commanded to be in either 10 MHz external, PMD Clock or Free Running. Values: 0 = 10 MHz External Clock, 1 = PMD clock, 2 = Free Run	Status Only	N/A	N/A

Base Channel Group: Frequency Ref Osc	Actual Clock Source	Denotes the actual mode the FRO is in either 10 MHz external, PMD Clock or Free Running. This parameter is determined based on the returned status from the FRO. Values: 0 = 10 MHz External Clock, 1 = PMD clock, 2 = Free Run	Status Only	N/A	N/A
	FRO Loss of Communication	Loss of Communications between the FRO & the CCCP - These are discretes ONLY there is no Loss of Communications.	Minor	02FF	froCommunicationFailure
	PMD Reference Clock Status	Provides an Indication that the external 10 MHz clock source from the PMD card is not longer toggling. Values: 0 = Pass & 1 = Fail	Notify/Warning	0200	froRefClockFailure
	External Clock Input Status	Provides an Indication that the external 10 MHz clock source is not longer toggling. Values: 0 = Pass & 1 = Fail	Notify/Warning	0201	froExternalClockFailure
	Frequency Reference Osc Clock Output Status	Provides an Indication that the On-Board 10 MHz clock source is not longer toggling. Values: 0 = Pass & 1 = Fail	Critical	0202	froOutputFailure
	Frequency Reference Osc BIT Status	Provides an Indication that the On-Board 10 MHz clock source is not longer toggling OR Loss of the Phase Lock Loop on the on-board Osc from either external Source. Values: 0 = Pass & 1 = Fail	Critical	0203	froOscillatorBITFailure
	Baud Lock Fault Status	Provides indication that the Baud Clock is Phase Loop Locked. The Baud Clock is PLL to the Byte Clock signal from the CCCP Card that determines Symbol Rate. Value: 0 = Pass & 1 = Fault	Critical	0300	hSpdModulatorBaudLockFailure
	Data Status	Provides indication that there is Data Present at the Input of the HS Modulator. This is a gross toggle detection on the input bits. Value: 0 = Pass & 1 = Fault	Critical	0306	hspDataFailure

Base Channel Group: High Speed Modulator	4x Clock Fault Status	Provides indication that the 4x clock is Phase Loop Locked. The 4x Clock is PLL to the Byte Clock signal from the CCCP Card that determines Symbol Rate. This is for the Digital to Analog Conversion. Value: 0 = Pass & 1 =Fault	Critical	0301	hSpdMod4xClockFailure
	L-Band Output Power Level Current Fault Status	Provides indication that L-Band Output signal is above a predetermined Threshold Power level at the output of the HS Modulator. Value: 0 = Pass & 1 =Fault	Critical	0302	hSpdLBandOuptuFailure
	Pilot Output Level Current Fault Status	Provides indication that Pilot Output signal is above a predetermined Threshold Power level at the output of the HS Modulator. Value: 0 = Pass & 1 =Fault	Critical	0303	hSpdPilotOuptuFailure
	Reference Clock Status	Provides an indication that the input Reference 10 MHz Oscillator from the FRO is present. This only detects Clock Toggling and not frequency or signal level. Value: 0 = Pass & 1 = Fault.	Critical	0307	hspReferenceClockFailure
	L-Band Synthesizer Fault Current Fault Status	Provides indication that the L-Band Synthesizer (950 - 1950 MHz) is Phase Loop Locked to the external 10 MHz Clk from the FRO. Value: 0 = Pass & 1 =Fault	Critical	0304	hspLBandSynthesizerEvent
	Pilot Synthesizer Fault Current Fault Status	Provides indication that the L-Band Synthesizer (950 - 1950 MHz) is Phase Loop Locked to the external 10 MHz Clk from the FRO. Value: 0 = Pass & 1 =Fault	Critical	0305	hspPilotSynthesizerEvent
	HSM Loss of Communication	Alarm indication that Loss of communications between the CCCP and the High Speed Modulator (RS-232 link) has occurred.	Minor	03FF	hspCommunicationFailure
	L-Band Output Power - Actual	Provides the actual output Power level seen at the output of the High Speed Modulator of the L-Band signal. Value: -20 dBm to 10 dBm in 1 dB steps	Perf Mon	N/A	N/A

	Pilot Tone Output Power - Actual	Provides the actual output Power level seen at the output of the High Speed Modulator of the Output Pilot Tone signal. Value: -20 dBm to 10 dBm in 1 dB steps	Perf Mon	N/A	N/A
	Alarm Indication Signal	This is an indication that the PMD Card is receiving an indication that the incoming stream is corrupt. One of two things triggered the AIS: 1. Either the X1 & X2 bits are non-zero (either of them) OR 2. All the Framing bits (P, M, X, & C) are good but the payload Data received is a repeating pattern of "1010101010....". Value: 0 = Not Active & 1 - Alarm Active	Notify/ Warning	0700	ds3AISEvent
	Loss of Signal (LOS)	The LOS indication is declared upon observing 175 +/- 75 contiguous pulse positions with no pulses of either positive or negative polarity. Value: 0 = Not Active & 1 - Alarm Active (This indication is part of the DS3 Link Available/ Unavailable Determination)	Status Only	N/A	N/A
	Loss of Frame	A DS3 Loss of Frame (LOF) failure is declared when the DS3 OOF defect is consistent for 6 consecutive seconds. Value: 0 = Not Active & 1 - Alarm Active	Status Only	N/A	N/A
	Out of Frame	A DS3 Out of Frame (OOF) failure is declared when 3 or more Framing Errors with the M and F bits are detected in a one second Period. Value: 0 = Not Active & 1 - Alarm Active	Status Only	N/A	N/A
	Line Errored Seconds	A Line Errored Second is a second with at least 1 or more Line Code Violations. LES is a count of the number of Line Errored Seconds. (0 - 65535) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

PMD Card (DS3)	P-Bit Errored Seconds	A P-Bit Errored Second is a second with at least 1 or more P-Bit Parity checks that have failed. P-Bit Parity checks Path Parity only. Count of the number of P-Bit Errored Seconds. (0 - 65535) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	P-Bit Severely Errored Seconds	A P-Bit Severely Errored Second is a second with 44 or more P-Bit Parity checks that have failed. Count of the number of P-Bit Severely Errored Seconds. (0 - 65535) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	C-Bit Errored Seconds	A C-Bit Errored Second is a second with at least 1 or more C-Bit Parity checks that have failed. C-Bit Parity checks end to end link Parity. Count of the number of C-Bit Errored Seconds. (0 - 65535) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	C-Bit Severely Errored Seconds	A C-Bit Severely Errored Second is a second with 44 or more C-Bit Parity checks that have failed. Count of the number of C-Bit Severely Errored Seconds. (0 - 65535) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Severely Errored Framing Seconds	Count of the number seconds that the Loss of Framing flag is asserted. Each time a LOF is declared the SEFS counter is incremented. Severely Errored Framing Seconds. (0 - 65535) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Line Code Violations	Raw Count of the number of Line Code Violations. A Line Code Violation consists of either an Excessive Zero Event (EXZ) and Bipolar Zero (BPZ) Error Event. Count LCVs (0 - 2^32) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

P-Bit Code Violations	Raw Count of the number of P-Bit Code Violations. A P-Bit Code Violation is a parity failure relative to just the P1 & P2 bits of the DS3 Multi-frame. This monitors parity on just the local path. Count PCVs (0 - 2 ³²) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
C-Bit Code Violations	Raw Count of the number of C-Bit Code Violations. A C-Bit Code Violation is a parity failure relative to just the C31, C32, & C33 bits of the DS3 Multi-frame. This monitors parity on just the End-To-End path of the DS3. Count CCVs (0 - 2 ³²) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Errored Seconds	An Errored Second occurs if at any point in a one second period a LCV, PCV, CCV, or OOF occurs. Count of ES (0 - 65535) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Severely Errored Seconds	A Severely Errored Second occurs if at any point in a one second period where more than 44 PCVs or CCVs, 30% or greater than LCVs, LOF, AIS or LOS occur. Count of SES (0 - 65535) For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Link Down	Indication that the DS3 link is Unavailable or Down. Link Down is determined when 10 Severely Errored Seconds occur consecutively.	Critical	0701	ds3LinkEvent
PMD BIT Fail	PMD BIT verifies that 2 registers of the 7345 (DS3 PHY Chip) are accessible to the software via the CCCP card. More of a Comm Test. Value: 0 = Pass/1 = Fault	Critical	0702	ds3BITEvent
Loss of Communication	Loss of processor communication capability between the 860SAR CCCP and the PMD card via the Processor Bus.	Minor	07FF	ds3CommunicationFailure

DownLink	Downstream Link Summary Status	Summary of all the main indicators for the downlink that the downlink is good. Combines the L-Band Output Indicator on the Modem, the SRIU Filter Fault indicator for the respective Filter Card, the IF Bit indicator and the RF Bit Indicator for the Transmitter. Value: 0 = Disabled & 1 = Enabled.	Critical	Needs an Alarm Code	downlinkEvent
	Actual Downstream Transmit Power	Transmit Power read from the Transmitter in dBm. Value: +12.0 to +30.0 dBm in 0.1 dBm resolution.	Perf Mon	N/A	N/A
	Actual Downstream Data Rate	25 to 45 Mbps	Perf Mon	N/A	N/A
UpLink	Upstream Link Availability Status	Determined by the WMAC Link Availability Algorithm. If 10 consecutive Severely Seconds occur then the Link will transition from Up to Down. It will transition back to available after 10 consecutive Errored or Error free seconds in in the Unavailable state. Value: 0 = Up & 1 = Down. Values: 0 = Available, 1 = Unavailable, 2 = Unallocated	Critical	1000	uplinkUpstrnEvent
	Upstream Potential Rain Fade	Potential Rain Fade is set if the Es/No power window of the DCDM Tuner/Demod is at it min Attenuation and is operating outside the window for 10 consecutive seconds. Value: 0 = No rain Fade, 1 = Potential Rain Fade	Notify/Warning	Potential Rain Fade Notification	uplinkUpstrnEvent
	Unauthorized CPE Notification	Notification is used to notify operators that a CPE has been detected with an Invalid encrypted NIU Signature.	Notify/Warning	Unauthorized CPE Notification	uplinkUpstrnEvent
	Duplicate CPE Notification	Notification is used to Notify operators that a CPE has been detected which is using the same serial number as another CPE in that Channal Group.	Notify/Warning	Duplicate CPE Notification	uplinkUpstrnEvent
	Actual Upstream Data Rate	2000 - 10,000 Kpbs with 100 Kbps resolution	Perf Mon	N/A	N/A

	Actual Upstream RF Transmit Frequency	27,900 - 28,350 MHz with 5 MHz resolution	Perf Mon	N/A	N/A
	Errored Seconds	Errored Second is a second where a single dropped cell was detected. A cell is dropped if either the Reed-Solmon check fails, frame sync from the Demod is lost or the Frame Format Preamble Bytes on the DAVIC packet are errored. Count of the # of Errored Seonds 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Severely Errored Seconds	A Severely Errored Second is one Second where the Bad cell count is more than 30% of the total number of cells possible in that second, Cell Delinieation dropped cells are detected, or carrier lock is lost from the Demod. Count of the # of Severely Errored Seonds 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Incoming Bad Cell Count	The Bad cell counter is incremented if either the Reed-Solmon check fails, frame sync from the Demod is lost or the Frame Format Preamble Bytes on the DAVIC packet are errored. Count of the # of Received Bad Cells 0 - 65535	Perf Mon	N/A	N/A
	Fault LED Setting	Provides an indication that the Fault LED is on. Value: 0 = Fault LED Off and 2 = Fault LED On	Status Only	N/A	N/A
	Temperature Sensor Level	Actual Temperature inside the cavity of the Transmitter. Value: 0x80 to 0x7F (digital value)	Perf Mon	N/A	N/A
	RF BIT Level	12.0 to 30.0 dB - measures the actual RF power level in 0.1 dB resolution and 1 dB increments.	Perf Mon	N/A	N/A

SS Transmitter	RF Power Level	BIT indicator that says the output RF power output is below the provisioned threshold power level. This indicator is located after the HPA. Value: 0 = RF Power OK & 1 = RF Power Level Low.	Critical	0400	transmitterRFPowerFailure
	IF Power Level	BIT indicator that says the Input IF power output is below the provisioned threshold power level. This indicator is located before the HPA. Value: 0 = RF Power OK & 1 = IF Power Level Low.	Critical	0404	transmitterIFPowerFailure
	IF BIT Level	"-17.0 to 3.0 dBm" - measures the actual value of the Input IF Power level in 0.1 dBm resolution and 1 dBm increments.	Perf Mon	N/A	N/A
	Reset	Set to 1 when a reset has occurred and is not provisioned yet since that reset. Cleared once provisioning commands occur. Value: 0 = Not Reset, 1 = Reset	Status Only	N/A	xmtrEquipmentEvent
	Digital Board BIT	BIT Indicator that denotes that the Node Digital Assembly (NDA) of the transmitter has failed one or more of its power up tests - currently only a Memory CRC is tested at POST. Value: 0 = BIT Pass, 1 = BIT Fail	Minor	0405	transmitterDigBoardEvent
	Over Temp BIT	BIT Indicator that denotes there is the internal transmitter cavity temperature has exceeded a pre-provisioned threshold. Value: 0 = Not over temp condition, & 1 = Over Temp condition	Notify/Warning	0406	transmitterOverTemperatureEvent
	DC power	BIT Indicator that denotes the nominal operating voltage level has fallen below a preset threshold. It is an ORing of five different DC Power monitors: +5, +8.5, +15, -5, -15 Volts +/-5% for all voltages. Value: 0 = DC Power OK, 1 = DC Power Bad	Critical	0401	transmitterDCPowerFailure

	LO Lock	BIT Indicator that denotes that the Node Local Oscillator is Phase Loop Locked to the external 960 MHz Ref Oscillator. Assertion of this alarm indicates that the LO is NO longer locked to the 960 MHz. (The Ref 960Mhz signal may not be generated from the same Base Channel Group as the Transmit Payload signal) Value: 0 = LO Locked & 1 = LO Not Locked	Notify/ Warning	0402	transmitterLocalOscillatorFailure
	LO Power Level	BIT Indicator that denotes the output power level of the Node Local Oscillator has fallen below a pre-provisioned threshold. Value: 0 = LO Power OK & 1 = LO Power Low	Critical	0403	transmitterLocalOscillatorPowerFailure
	SS TX Loss Of Communication	Alarm indication that Loss of communications between the CCCP and the Transmitter (RS-485) has occurred.	Critical	04FF	transmitterCommunicationFailure
SS Receiver	Fault LED Setting	Provides an indication that the Fault LED is on. Value: Fault LED Off and 2 = Fault LED On	Status Only	N/A	N/A
	Temperature Sensor Level	Actual Temperature inside the cavity of the Transmitter. Value: 0x80 to 0x7F (digital value)	Perf Mon	N/A	N/A
	Digital Board BIT	BIT Indicator that denotes that the Node Digital Assembly (NDA) of the transmitter has failed one or more of its power up tests - currently only a Memory CRC is tested at POST. Value: 0 = BIT Pass, 1 = BIT Fail	Minor	0603	receiverDigBoardEvent
	Reset	Set to 1 when a reset has occurred and is not provisioned yet since that reset. Cleared once provisioning commands occur. Value: 0 = Not Reset, 1 = Reset	Status Only	Reset Nodifty	
	Power BIT	BIT Indicator that denotes the nominal operating voltage level has fallen below a preset threshold. It is an ORing of five different DC Power monitors: +5, +8.5, +15, -5, -15 Volts +/-5% for all voltages. Value: 0 = DC Power OK, 1 = DC Power Bad	Critical	0600	receiverPowerFailure

	Over Temp BIT	BIT Indicator that denotes there is the internal transmitter cavity temperature has exceeded a pre-provisioned threshold. Value: 0 = Not over temp condition, & 1 = Over Temp condition	Notify/ Warning	0604	receiverOverTemperatureEvent
	LO Lock	BIT Indicator that denotes that the Node Local Oscillator is Phase Loop Locked to the external 960 MHz Ref Oscillator. (The Ref 960Mhz signal may not be generated from the same Base Channel Group as the Transmit Payload signal) Value: 0 = LO Locked & 1 = LO Not Locked	Notify/ Warning	0601	receiverLOLockFailure
	LO Power Level	BIT Indicator that denotes the output power level of the Node Local Oscillator has fallen below a pre-provisioned threshold. Value: 0 = LO Power OK & 1 = LO Power Low	Critical	0602	receiverLocalOscillatorPowerFailure
	RX Loss Of Communication	Alarm indication that Loss of communications between the CCCP and the Receiver (RS-485) has occurred.	Minor	06FF	receiverCommunicationsFailure
SRIU	Surge Suppressor	BIT Indicator that denotes a Surge Suppression has occurred on one of input or Output connectors. NOT IMPLEMENTED. Value: 0 = BIT Pass, 1 = BIT Fail	Critical	0813	sriuSurgeSuppressorEvent
	Reset	Set to 1 when a reset has occurred and is not provisioned yet since that reset. Cleared once provisioning commands occur. Value: 0 = Not Reset, 1 = Reset	Status Only	Reset Notify	
	Temperature	NOT IMPLEMENTED. Value: 0 = BIT Pass, 1 = BIT Fail	Notify/ Warning	0811	sriuTemperatureEvent
	Door Ajar	BIT indicator to denote that the door of the SRIU Chassis is "Opened" Normal operations this door should be shut. NOT IMPLEMENTED. Value: 0 = BIT Pass, 1 = BIT Fail	Notify/ Warning	0812	sriuDoorAjarEvent
	Digital Board	BIT Indicator that denotes that the Digital Assembly of the Receiver has failed one or more of its power up or continuous BIT tests. Value: 0 = BIT Pass, 1 = BIT Fail	Minor	0800	sriuRs485Failure

Power Supply # 2	BIT Indicator that denotes the nominal operating voltage level has fallen below a preset threshold. It is an ORing of two different DC Power monitors: +5 and -5 Volts +/-5% for all voltages. Value: 0 = BIT Pass, 1 = BIT Fail	Critical	0810	sriuPowerSupply2Event
Power Supply # 1	BIT Indicator that denotes the nominal operating voltage level has fallen below a preset threshold. It is an ORing of two different DC Power monitors: +5 and -5 Volts +/-5% for all voltages. Value: 0 = BIT Pass, 1 = BIT Fail	Critical	0801	sriuPowerSupply1Event
960 MHz Filter 1	BIT Indicator that denotes that the output 960 MHz CW signal has fallen 10-15 dB from nominal value. This does NOT have the same over/under detection other cards have, only the output Power monitor on the CW signal. Value: 0 = BIT Pass, 1 = BIT Fail	Minor	0802	sriu960MhzFilter1Status
960 MHz Filter 2	BIT Indicator that denotes that the output 960 MHz CW signal has fallen 10-15 dB from nominal value. This does NOT have the same over/under detection other cards have, only the output Power monitor on the CW signal. Value: 0 = BIT Pass, 1 = BIT Fail	Minor	0893	sriu960MhzFilter2Status
Redundant IF Card # 2	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Minor	080E	sriuSpareIFFilterCard1Event

Redundant IF Card # 1	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Minor	080F	sriuSpareIFFilterCard2Event
IF Filter #1	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Critical	0804	sriuIFFilter1Event
IF Filter #2	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Critical	0805	sriuIFFilter2Event
IF Filter #3	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Critical	0806	sriuIFFilter3Event

IF Filter #4	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Critical	0807	sriulFFilter4Event
IF Filter #5	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Critical	0808	sriulFFilter5Event
IF Filter #6	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Critical	0809	sriulFFilter6Event
IF Filter #7	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Critical	080A	sriulFFilter7Event

IF Filter #8	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Critical	080B	sriulFFilter8Event
IF Filter #9	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Critical	080C	sriulFFilter9Event
IF Filter #10	BIT Indicator that denotes Over or Under current condition on the operation of each stage of a three stage amplifier. All six values are ORed together that denote A IF filter Card fault. Over Current condition = Short in an Amp and an Under Current Condition = Open in an Amp. (Users do not have visibility to this detail but useful for card debugging.) Value: 0 = BIT Pass, 1 = BIT Fail	Critical	080D	sriulFFilter10Event
SRIU Loss of Communication	Alarm indication that Loss of communications between the CCCP and the SRIU Digital Board (RS-485) has occurred.	Minor	08FF	sriuCommunicationFault
Fault Light	Provides an indication that the Fault LED is on. Value: 0 = Off and 1 = On	Status Only	N/A	N/A

	CPE Downstream Link Availability Status	Indication of the current Status of the Received downstream link at each CPE. Status changes are relative to 10 Consecutive Severely Errored, Errored or non-errored Seconds. 10 Consecutive Severely Errored seconds results in and Unavailable status and its cleared by 10 Consecutive Errored or Non-Errored Seconds. Values: 0=Available / 1=Unavailable / 2=Unallocated	Critical	0E00	No Trap Defined
	Restart Time	Time since Last Reset In seconds since 00:00:00 UTC Jan 1, 1970	Status Only	N/A	N/A
	Current Receive Power	This is a measure of the input power level being received from the Node. Values: "-64 dB to 2.0 dB in 1 dB steps" For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Current Transmit Power	This is a measure of the output Transmit power of the Antenna to the Node. Values: "-64 dB to 2.0 dB in 1 dB steps" For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Frequency Error	This measures the Frequency Error in MHz to provide an indication of how far off the actual carrier signal that the NIU is locked to, is from the Provisioned frequency. Values: "-1 Mhz to 1 Mhz in 1Mhz steps" For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Downstream Signal to Noise Ratio	This is a measure of the Downstream Signal to Noise Ratio in terms of dB. Values: 0 to 25.5 dB in 0.1 dB steps For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

CPE NIU

Downstream Cell Error Rate	This is an measure of the current cell error rate by measureing the drop cell count/Total cell count. Values: 0 to $2^{31} * 1e-9$ For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Errored Seconds	Errored Second is a second where a single dropped cell was detected. A cell is dropped if either the Reed-Solmon check fails, frame sync from the Demod is lost or the Frame Format Preamble Bytes on the DAVIC packet are errored. Count of the # of Errored Seonds 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Severely Errored Seconds	A Severely Errored Second is one Second where the Bad cell count is more than 30% of the total number of cells possible in that second, Cell Delinieation dropped cells are detected, or carrier lock is lost from the Demod. Count of the # of Severely Errored Seonds 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
CPU Instruction/Operation Check Status	Software BIT status that denotes "0 = Pass, 1 = Fault Detected" Part of POST on the 860SAR - Not sure this will be reportable since the Processor will lock up.	Critical	0F04 NC Object	cpeStartupCheckEvent
ROM CRC Check Status	Software BIT status that denotes "0 = Pass, 1 = Fault Detected" Part of POST on the 860SAR - Not sure this will be reportable since the Processor will lock up.	Critical	0F05 NC Object	cpeStartupCheckEvent
RAM Data/Address Check Status	Software BIT status that denotes "0 = Pass, 1 = Fault Detected" Part of POST on the 860SAR - Not sure this will be reportable since the Processor will lock up.	Critical	0F06 NC Object	cpeStartupCheckEvent

	ISR Check Status	Software BIT status that denotes "0 = Pass, 1 = Fault Detected" Part of POST on the 860SAR - Not sure this will be reportable since the Processor will lock up.	Critical	0F07 NC Object	cpeStartupCheckEvent
	Software Error		Notify/ Warning	0F00 NC Object	
	Flash Programming Error		Notify/ Warning	0F01 NC Object	
	Flash Programming Aborted		Notify/ Warning	0F02 NC Object	
	Download Failed		Notify/ Warning	0F03 NC Object	
	RS-232 Communication Status	0 = Pass 1 = Fault Detected	Notify/ Warning	0F09 NC Object	cpeCommEvent
	Ethernet Communication Status	0 = Pass 1 = Fault Detected	Critical	0F0A NC Object	
	Tuner/Demod Acquisition State	This provides an indication as to where in the process the Tuner/Demod is at acquiring a Downlink. Values: 0 = Acquisition Disable, 1 = Fade Acquisition, 2 = Change parameter acquisition, 3 = Locked to signal, 4 = Power Up Acquisiton.	Status Only	N/A	N/A
	Frequency Drift Threshold BIT Indicator	Indicates that the measured frequency error at the tuner demodulator has exceeded the provisioned frequency error. Values: 0 = OK & 1 = Fault	Notify/ Warning	0901	cpeTunerDemodEvent
	Carrier Lock State	This provides indication that the Synthesizer is locked on the downstream Carrier at the specified frequency of the Tuner. Values: 0 = Locked & 1 = Unlocked,	Critical	0904	cpeTunerDemodEvent

CPE Tuner/Demod	DAGC Saturated State BIT	Indicates that the Digital Automatic Gain Control (DAGC) has saturated for atleast 10 consecutive samples. This is not necessarily a fault indication. Normal operations might cause this such as a rain fade condition. Values: 0 = Not Saturated & 1 = Saturated	Notify/ Warning	0902	
	AGC Saturated State BIT	Indicates that the Analog Automatic Gain Control (AGC) has saturated for atleast 10 consecutive samples. This is not necessarily a fault indication. Normal operations might cause this such as a rain fade condition. Values: 0 = Not Saturated & 1 = Saturated	Notify/ Warning	0903	
	Estimated Es/No	Actual Real time value of the Es/No, used for Power Control monitoring point on the upstream path (Values: 0 - 25.5 dB) - Performance Monitoring Parameter	Perf Mon	N/A	N/A
	AGC Acumulator	Actual value of the analog AGC register. Larger values of this parameter mean more gain is being used to adjust the signal input to the A/Ds in the Demod. Upon saturation level for 10 consecutive samples the AGC Saturated BIT indicator will be issued. Value: 0x00 - 0xFF - Performance Monitoring Parameter	Perf Mon	N/A	N/A
	DAGC Acumulator	Actual value of the Digital AGC register. Larger values of this parameter mean more gain is being used to adjust the signal input to the A/Ds in the Demod. Upon saturation level for 10 consecutive samples the DAGC Saturated BIT indicator will be issued. Value: 0 - 63 Performance Monitoring Parameter	Perf Mon	N/A	N/A
CPE Modulator	L-Band Synthesizer Lock Status	Provides indication that the L-Band Synthesizer (950 - 1950 MHz) is Phase Loop Locked to the external Clk. Value: 0 = Pass & 1 = Fault	Notify/ Warning	0A00	niuModulatorEvent

OF L Modulator	Actual L-Band Output Power	Provides the actual output Power level seen at the output of the High Speed Modulator of the L-Band signal. Value: "-64 dBm to 2 dBm" in 0.1 dBm Resolution (0xFD7F - 0x0014)	Perf Mon	N/A	N/A
	Link Status	Indication that the DS1 link is Unavailable or Down. Link Down is determined when 10 Severely Errored Seconds occur consecutively. Values: 0 = Up 1 = Down	Critical	0B00	(sccT1Event or sccE1Event) & iftable Link Down
	BIT Status	0 = Pass 1 = Fail	Critical	0B02	sccT1Event or sccE1Event
	Alarm Indication Signal	T1 AIS denoting the the T1 Interface is receiving all "1"s in the Data Payload for a time greater than 75 ms. Values: 0 = Not Active, 1 = Active	Notify/ Warning	0B01	sccT1Event or sccE1Event
	SCC T1/E1 Loss of Comm	Provides and Alarm indication that the NIU 860SAR can no longer communicate with the SCC T1/E1 IWF (PMC 4351 chip)	Notify/ Warning	0BFF	
	Loss of Signal	T1 Loss of Signal is detected when the incoming signal has "no transitions" for between 10-255 consecutive pulses intervals. Values: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
	Loss of Frame	T1 Loss of Framing indicator means that two or more framing errors have occurred within a 3 msec period. Values: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
	Out of Frame	Same as Loss of Frame - recommend Deletion: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
	Errored Seconds	Provides a count of all Errored Seconds as seen in that particular interval. A Errored Second is a one second period that experience from 1 to 319 CRC6 Events. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

SCC T1/E1 IWF	Severely Errored Seconds	Provides a count of all Severely Errored Seconds as seen in that particular interval. A Severely Errored Second is a one second period with any defect (Loss of Signal, Loss of Framing or AIS) occurring or greater than 320 CRC6 errors detected. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Unavailable Seconds	Provides a count of the number of Unavailable Seconds as seen in that particular interval. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Controlled Slip Seconds	Provides a count of all Controlled Slip Seconds as seen in that particular interval. A Controlled Slip Second is the replication or deletion of the payload bits of a DS1 Fram to Sync the timing up. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Line Errored Seconds	Provides a count of all Line Errored Seconds as seen in that particular interval. A Line Errored Second is a one second period that has experience atleast one or more LCVs. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Line Code Violations	Provides a count of all Line Code Violations (LCV) as seen in that particular interval. A Line Code Violation is a the occurance of either a Bipolar Violation or an Excessive Zero Event. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

	Path Code Violations	Provides a count of all Path Code Violations (PCVs) as seen in that particular interval. A Path Code Violation is a frame synch bit error in the D4 & E1-noCRC format or a CRC error in the ESF and E1-CRC format. Values: 0 - 2 ³² For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Bursty Errored Seconds	Provides a count of all Bursty Errored Seconds as seen in that particular interval. A Bursty Errored Second is a with atleast one PCV but not more that 320 and no SEFS or AIS. Values: 0 - 2 ³² For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Severely Errored Framing Seconds (SEFS)	Provides a count of all Severely Errored Framing Seconds (SEFS) as seen in that particular interval. A SEFS is a one second period with atleast one out of Frame or Loss of Frame detected. Values: 0 - 2 ³² For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	CRC6 Errors	Provides a count of all CRC6 Errors as seen in that particular interval. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Quad T1/E1 Loss of Comm	Provides and Alarm indication that the NIU 860SAR can no longer communicate with the Quad T1/E1 IWF (any one of more of the PMC 4351 chips)	Notify/ Warning	0CFF	
	Port 1 Link Status	Indication that the DS1 link is Unavailable or Down. Link Down is determed when 10 Severely Errored Seconds occur consecutively. Values: 0 = Up 1 = Down	Critical	0C00	(quadTPortEvent or quadE1PortEvent) & iftable Link Down
	Port 1 BIT Status	0 = Pass 1 = Fail	Critical	0C08	quadPortT1Event or quadE1PortEvent

Port 1 Alarm Indication Signal	T1 AIS denoting the the T1 Interface is receiving all "1"s in the Data Payload for a time greater than 75 ms. Values: 0 = Not Active, 1 = Active	Notify/Warning	0C04	quadPortT1Event or quadE1PortEvent
Port 1 Loss of Signal	T1 Loss of Signal is detected when the incoming signal has "no transitions" for between 10-255 consecutive pulses intervals. Values: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 1 Loss of Frame	T1 Loss of Framing indicator means that two or more framing errors have occurred within a 3 msec period. Values: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 1 Out of Frame	Same as Loss of Frame - recommend Deletion: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 1 Errored Seconds	Provides a count of all Errored Seconds as seen in that particular interval. A Errored Second is a one second period that experience from 1 to 319 CRC6 Events. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 1 Severely Errored Seconds	Provides a count of all Severely Errored Seconds as seen in that particular interval. A Severely Errored Second is a one second period with any defect (Loss of Signal, Loss of Framing or AIS) occurring or greater than 320 CRC6 errors detected. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 1 Unavailable Seconds	Provides a count of the number of Unavailable Seconds as seen in that particular interval. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

Port 1 Controlled Slip Seconds	Provides a count of all Controlled Slip Seconds as seen in that particular interval. A Controlled Slip Second is the replication or deletion of the payload bits of a DS1 Fram to Sync the timing up. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 1 Line Errored Seconds	Provides a count of all Line Errored Seconds as seen in that particular interval. A Line Errored Second is a one second period that has experience atleast one or more LCVs. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 1 Line Code Violations	Provides a count of all Line Code Violations (LCV) as seen in that particular interval. A Line Code Violation is a the occurance of either a Bipolar Violation or an Excessive Zero Event. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 1 Path Code Violations	Provides a count of all Path Code Violations (PCVs) as seen in that particular interval. A Path Code Violation is a frame synch bit error in the D4 & E1-noCRC format or a CRC error in the ESF and E1-CRC format. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 1 Bursty Errored Seconds	Provides a count of all Bursty Errored Seconds as seen in that particular interval. A Bursty Errored Second is a with atleast one PCV but not more that 320 and no SEFS or AIS. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

Port 1 Severely Errored Framing Seconds (SEFS)	Provides a count of all Severely Errored Framing Seconds (SEFS) as seen in that particular interval. A SEFS is a one second period with atleast one out of Frame or Loss of Frame detected. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 1 CRC6 Errors	Provides a count of all CRC6 Errors as seen in that particular interval. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 2 Link Status	Indication that the DS1 link is Unavailable or Down. Link Down is determed when 10 Severely Errored Seconds occur consecutively. Values: 0 = Up 1 = Down	Critical	0C01	(quadTPortEvent or quadE1PortEvent) & iftable Link Down
Port 2 BIT Status	0 = Pass 1 = Fail	Critical	0C09	quadPortT1Event or quadE1PortEvent
Port 2 Alarm Indication Signal	T1 AIS denoting the the T1 Interface is receiving all "1"s in the Data Payload for a time greater than 75 ms. Values: 0 = Not Active, 1 = Active	Notify/ Warning	0C05	quadPortT1Event or quadE1PortEvent
Port 2 Loss of Signal	T1 Loss of Signal is detected when the incoming signal has "no transitions" fo r between 10-255 consecutive pulses intervals. Values: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 2 Loss of Frame	T1 Loss of Framing indicator means that two or more framing errors have occurred within a 3 msec period. Values: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 2 Out of Frame	Same as Loss of Frame - recommend Deletion: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 2 Errored Seconds	Provides a count of all Errored Seconds as seen in that particular interval. A Errored Second is a one second period that experience from 1 to 319 CRC6 Events. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

Port 2 Severely Errored Seconds	Provides a count of all Severely Errored Seconds as seen in that particular interval. A Severely Errored Second is a one second period with any defect (Loss of Signal, Loss of Framing or AIS) occurring or greater than 320 CRC6 errors detected. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 2 Unavailable Seconds	Provides a count of the number of Unavailable Seconds as seen in that particular interval. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 2 Controlled Slip Seconds	Provides a count of all Controlled Slip Seconds as seen in that particular interval. A Controlled Slip Second is the replication or deletion of the payload bits of a DS1 Fram to Sync the timing up. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 2 Line Errored Seconds	Provides a count of all Line Errored Seconds as seen in that particular interval. A Line Errored Second is a one second period that has experience atleast one or more LCVs. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 2 Line Code Violations	Provides a count of all Line Code Violations (LCV) as seen in that particular interval. A Line Code Violation is a the occurance of either a Bipolar Violation or an Excessive Zero Event. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

Quad T1/E1

Port 2 Path Code Violations	Provides a count of all Path Code Violations (PCVs) as seen in that particular interval. A Path Code Violation is a frame synch bit error in the D4 & E1-noCRC format or a CRC error in the ESF and E1-CRC format. Values: 0 - 2 ³² For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 2 Bursty Errored Seconds	Provides a count of all Bursty Errored Seconds as seen in that particular interval. A Bursty Errored Second is a with atleast one PCV but not more that 320 and no SEFS or AIS. Values: 0 - 2 ³² For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 2 Severely Errored Framing Seconds (SEFS)	Provides a count of all Severely Errored Framing Seconds (SEFS) as seen in that particular interval. A SEFS is a one second period with atleast one out of Frame or Loss of Frame detected. Values: 0 - 2 ³² For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 2 CRC6 Errors	Provides a count of all CRC6 Errors as seen in that particular interval. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 3 Link Status	Indication that the DS1 link is Unavailable or Down. Link Down is determed when 10 Severely Errored Seconds occur consecutively. Values: 0 = Up 1 = Down	Critical	0C02	(quadTPortEvent or quadE1PortEvent) & iftable Link Down
Port 3 BIT Status	0 = Pass 1 = Fail	Critical	0C0A	quadPortT1Event or quadE1PortEvent
Port 3 Alarm Indication Signal	T1 AIS denoting the the T1 Interface is receiving all "1"s in the Data Payload for a time greater than 75 ms. Values: 0 = Not Active, 1 = Active	Notify/ Warning	0C06	quadPortT1Event or quadE1PortEvent

Port 3 Loss of Signal	T1 Loss of Signal is detected when the incoming signal has "no transitions" for between 10-255 consecutive pulses intervals. Values: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 3 Loss of Frame	T1 Loss of Framing indicator means that two or more framing errors have occurred within a 3 msec period. Values: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 3 Out of Frame	Same as Loss of Frame - recommend Deletion: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 3 Errored Seconds	Provides a count of all Errored Seconds as seen in that particular interval. A Errored Second is a one second period that experience from 1 to 319 CRC6 Events. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 3 Severely Errored Seconds	Provides a count of all Severely Errored Seconds as seen in that particular interval. A Severely Errored Second is a one second period with any defect (Loss of Signal, Loss of Framing or AIS) occurring or greater than 320 CRC6 errors detected. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 3 Unavailable Seconds	Provides a count of the number of Unavailable Seconds as seen in that particular interval. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 3 Controlled Slip Seconds	Provides a count of all Controlled Slip Seconds as seen in that particular interval. A Controlled Slip Second is the replication or deletion of the payload bits of a DS1 Fram to Sync the timing up. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

Port 3 Line Errored Seconds	Provides a count of all Line Errored Seconds as seen in that particular interval. A Line Errored Second is a one second period that has experience atleast one or more LCVs. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 3 Line Code Violations	Provides a count of all Line Code Violations (LCV) as seen in that particular interval. A Line Code Violation is a the occurance of either a Bipolar Violation or an Excessive Zero Event. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 3 Path Code Violations	Provides a count of all Path Code Violations (PCVs) as seen in that particular interval. A Path Code Violation is a frame synch bit error in the D4 & E1-noCRC format or a CRC error in the ESF and E1-CRC format. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 3 Bursty Errored Seconds	Provides a count of all Bursty Errored Seconds as seen in that particular interval. A Bursty Errored Second is a with atleast one PCV but not more that 320 and no SEFS or AIS. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 3 Severely Errored Framing Seconds (SEFS)	Provides a count of all Severely Errored Framing Seconds (SEFS) as seen in that particular interval. A SEFS is a one second period with atleast one out of Frame or Loss of Frame detected. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

Port 3 CRC6 Errors	Provides a count of all CRC6 Errors as seen in that particular interval. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 4 Link Status	Indication that the DS1 link is Unavailable or Down. Link Down is determined when 10 Severely Errored Seconds occur consecutively. Values: 0 = Up 1 = Down	Critical	0C03	(quadTPortEvent or quadE1PortEvent) & iftable Link Down
Port 4 BIT Status	0 = Pass 1 = Fail	Critical	0C0B	quadPortT1Event or quadE1PortEvent
Port 4 Alarm Indication Signal	T1 AIS denoting the the T1 Interface is receiving all "1"s in the Data Payload for a time greater than 75 ms. Values: 0 = Not Active, 1 = Active	Notify/ Warning	0C07	quadPortT1Event or quadE1PortEvent
Port 4 Loss of Signal	T1 Loss of Signal is detected when the incoming signal has "no transitions" for between 10-255 consecutive pulses intervals. Values: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 4 Loss of Frame	T1 Loss of Framing indicator means that two or more framing errors have occurred within a 3 msec period. Values: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 4 Out of Frame	Same as Loss of Frame - recommend Deletion: 0 = Not Active, 1 = Active	Status Only	N/A	N/A
Port 4 Errored Seconds	Provides a count of all Errored Seconds as seen in that particular interval. A Errored Second is a one second period that experience from 1 to 319 CRC6 Events. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

Port 4 Severely Errored Seconds	Provides a count of all Severely Errored Seconds as seen in that particular interval. A Severely Errored Second is a one second period with any defect (Loss of Signal, Loss of Framing or AIS) occurring or greater than 320 CRC6 errors detected. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 4 Unavailable Seconds	Provides a count of the number of Unavailable Seconds as seen in that particular interval. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 4 Controlled Slip Seconds	Provides a count of all Controlled Slip Seconds as seen in that particular interval. A Controlled Slip Second is the replication or deletion of the payload bits of a DS1 Fram to Sync the timing up. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 4 Line Errored Seconds	Provides a count of all Line Errored Seconds as seen in that particular interval. A Line Errored Second is a one second period that has experience atleast one or more LCVs. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
Port 4 Line Code Violations	Provides a count of all Line Code Violations (LCV) as seen in that particular interval. A Line Code Violation is a the occurance of either a Bipolar Violation or an Excessive Zero Event. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A

	Port 4 Path Code Violations	Provides a count of all Path Code Violations (PCVs) as seen in that particular interval. A Path Code Violation is a frame synch bit error in the D4 & E1-noCRC format or a CRC error in the ESF and E1-CRC format. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Port 4 Bursty Errored Seconds	Provides a count of all Bursty Errored Seconds as seen in that particular interval. A Bursty Errored Second is a with atleast one PCV but not more that 320 and no SEFS or AIS. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Port 4 Severely Errored Framing Seconds (SEFS)	Provides a count of all Severely Errored Framing Seconds (SEFS) as seen in that particular interval. A SEFS is a one second period with atleast one out of Frame or Loss of Frame detected. Values: 0 - 2^32 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
	Port 4 CRC6 Errors	Provides a count of all CRC6 Errors as seen in that particular interval. Values: 0 - 65535 For Current 15 min, 96 previous 15 min periods and a total past 24 hr count.	Perf Mon	N/A	N/A
CPE - NII /RIEP	Built In Ethernet Port Link Down	Alarm indication that the BIEP is Unavailable or Down.	Critical	0D00	No 2200 Trap but should be in iftable Link Down Trap
	InOctets	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A
	InUcastPkts	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A
	InNUcastPkts	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A
	InDiscards	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A
	InErrors	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A

CPE - NO/DIG

CPE - VLAN Service	InUnknownProtos	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A
	OutUcastPkts	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A
	OutNUcastPkts	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A
	OutDiscards	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A
	OutErrors	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A
	OutQlen	Not Currently Available - Implemented. 0 – 2^32 Counter	Perf Mon	N/A	N/A
	Number of Collisions	Number of Table Collisions which is the number of times the hash functions calculates an already used entry within the bridging SW. Value: 0 – 2^32 Counter - This is not a fault nor requires any action, Table collisions arise due to NIU Memory constraints.	Perf Mon	N/A	N/A
	Receive Packets from Ethernet	Count of the Number of Receive Packets from Ethernet side for that particular IF: Values: 0 – 2^32 Counter	Perf Mon	N/A	N/A
	Receive Bytes from Ethernet	Count of the Number of Receive Bytes from Ethernet side for that particular IF: Values: 0 – 2^32 Counter	Perf Mon	N/A	N/A
	Receive Packets from Ethernet Dropped	Count of the Number of Receive Packets from Ethernet side Dropped for that particular IF: Values: 0 – 2^32 Counter	Perf Mon	N/A	N/A
	Filtered Packets from Ethernet	Count of the Number of Filtered Packets from Ethernet side for that particular IF: Values: 0 – 2^32 Counter	Perf Mon	N/A	N/A
	Received Packets from ATM	Count of the Number of Received Packets from ATM side for that particular IF: Values: 0 – 2^32 Counter	Perf Mon	N/A	N/A
	Received Broadcast Packets from Ethernet	Count of the Number of Received Broadcast Packets from Ethernet for that particular IF: Values: 0 – 2^32 Counter	Perf Mon	N/A	N/A

	Received Multicast Packets from Ethernet	Count of the Number of Received Multicast Packets from Ethernet for that particular IF: Values: 0 – 2 ³² Counter	Perf Mon	N/A	N/A
	Received Packets w/Unknown Hosts	Count of the Number of Received Packets w/Unknown Hosts for that particular IF: Values: 0 – 2 ³² Counter	Perf Mon	N/A	N/A
	Total Received Packets from Ethernet, ATM, and Ethernet Dropped	Count of the Number of Total Received Packets from Ethernet, ATM, and Ethernet Dropped for that particular IF: Values: 0 – 2 ³² Counter	Perf Mon	N/A	N/A
	Transmitted Packtes	Count of the Number of Transmitted Packets for that particular IF: Values: 0 – 2 ³² Counter	Perf Mon	N/A	N/A
	Dropped Packets on ATM	Count of the Number of Dropped Packets relative to the ATM side for that particular IF: Values: 0 – 2 ³² Counter	Perf Mon	N/A	N/A
CPE CES Service	CES Cell Loss Status Reass Cells(BIT)	1 = No Loss & 1 = Loss	Perf Mon	N/A	N/A
	CES Reass Cells	0 = 2 ³² Counts the number of Reass Cells	Perf Mon	N/A	N/A
	CES Header Errors	0 = 2 ³² Counts the number of Cells w/Header Errors	Perf Mon	N/A	N/A
	CES Pointer ReFrames	0 = 2 ³² Counts the number of Framing Errors	Perf Mon	N/A	N/A
	CES Pointer Parity Errors	0 = 2 ³² Counts the number of Parity Errors	Perf Mon	N/A	N/A
	CES AAL1 Sequence Errors	0 = 2 ³² Counts the number of AAL1 Sequence Errors	Perf Mon	N/A	N/A
	CES Lost Cells	0 = 2 ³² Counts the number of Lost Cells	Perf Mon	N/A	N/A
	CES Misinserted Cells	0 = 2 ³² Counts the number of Misinserted Cells	Perf Mon	N/A	N/A
	CES Buffer Underflow Errors	0 = 2 ³² Counts the number of Buffer Underflow Errors	Perf Mon	N/A	N/A
	CES Buffer Overflow Errors	0 = 2 ³² Counts the number of Buffer Overflow Errors	Perf Mon	N/A	N/A